# **IMP Checklist**

The Inventory Management Plan (IMP) is an internal process for the Partner to institutionalize the completion of a high quality inventory. The IMP should be designed with this in mind, not strictly as a reporting requirement to EPA. The IMP checklist outlines what components should be included in an IMP and can be used as a guide for creating an IMP or pulling together existing documents. The checklist does not represent, and should not be used as a

substitute for an IMP. Partners may either have a single formal IMP document that addresses all of these components, or Partners may have a collection of Standard Operating Procedures (SOPs) and other relevant information that address these components when taken in total.

For the most current version of the IMP checklist see the Climate Leaders website at: http://www.epa.gov/climateleaders.

	IMP Component	Corporate Level Detail Required	Corporate Desktop Review: Issues to Consider	On-site IMP Review Issues to Consider			
Par	Partner Information						
1.	Company Name	Legal name of entity					
2.	Corporate Address	Physical and mailing address					
3.	Inventory Contact	Contact name and title					
4.	Inventory Contact Information	Contact information (telephone/fax/ email)					
Bou	ındary Conditions						
Org	anizational						
5.	Inclusion of Partially Owned or Controlled Assets	The basis for reporting emissions data from partially owned or controlled assets:  - Equity Approach  - Control Approach:  - Financial control criterion  - Operational control criterion	Is the approach consistent with the Climate Leaders Design Principles? If applicable, how is operational control defined? How is equity defined (e.g., based on financial ownership or value derived from company)?  Are leases adequately addressed?	Identify all business units or major divisions at site.  Confirm that all business units at the site are either included or specifically excluded.  Consider shared, co-located, or outsourced operations.  Is control demonstrated as documented?			
6.	Facilities List	A list of all facilities with location, % ownership, or % control.  Define if inventory is U.S. only or includes optional non-U.S. operations.	List should be complete and include all facilities (including leases if applicable). Fleet vehicles should also be included if not assigned to a facility. How does the list compare to other public sources listing company holdings? Has the Partner demonstrated due diligence on determining the accuracy of the list? What is the method for ongoing review of the list?	N/A			

# APPENDIX 3

	IMP Component	Corporate Level Detail Required	Corporate Desktop Review: Issues to Consider	On-site IMP Review Issues to Consider
Bou	ındary Conditions (d	continued)		
Оре	erational			
7.	GHG List	A list of GHGs included in inventory.	If there are no releases of any of the six major GHGs ( $CO_2$ , $CH_4$ , $N_2O$ , HFCs, PFCs, and $SF_6$ ) this should be documented to insure there is no oversight. Small sources of a GHG should not be excluded. How does this compare to the list of emission sources specified in #9 and #10?	Is the list of GHGs consistent with the IMP? Confirm all sources of GHGs are included in the inventory, as consistent with IMP.
8.	Emission Source Identification Procedure	A description of the procedure/method used to identify direct and indirect emission sources.	Is the procedure likely to identify all significant sources? Does the procedure capture all stationary, mobile, indirect, process, and fugitive sources? Including small sources (e.g., HFC emissions from refrigeration/AC equipment use, etc.)?  Does the procedure include networking with all the appropriate people, whose roles and responsibilities are defined in #24?	Is it likely that all emission sources will be captured? Is there an existing inventorying process, permitting process (like Title V), or other mechanism to help most efficiently identify direct and indirect emission sources?
9.	Direct Sources	A list of groups of sources by emission category for each facility or reporting unit. (e.g., under stationary combustion: thermal oxidizers, engines, flares, etc.). It is not necessary to enumerate each piece of equipment.	Are all direct emission sources included (stationary, mobile, fugitive, and process)? How does this list compare with other company sources of emissions (e.g., Title V air permit)?	List all GHG emission source types identified. Confirm each source type included in the inventory, as consistent with IMP.
10.	Indirect Sources – Energy Import/Export	A list of energy imports or exports that are reflected in the inventory (e.g., steam, electricity, hot water, etc.).	Are all indirect emission sources included (purchased electricity, steam, and hot water)?	List all GHG emission source types identified. Confirm each source type included in the inventory, as consistent with IMP.
11.	Optional Sources	A list of other optional emission sources that are accounted for in the inventory (e.g., out- sourced activities, upstream or down- stream activities, etc.)	Are optional sources included accurately (i.e., entire emissions source accounted for and not just the reductions)?  How does this list compare to company profile (e.g., company has a lot of 3rd party shipping but only employee commuting reported)?	If an optional source is included in the inventory, does the inventory capture the entire emission type? Is there evidence of similar optional sources which should also be included for consistency?

	IMP Component	Corporate Level Detail Required	Corporate Desktop Review: Issues to Consider	On-site IMP Review Issues to Consider			
Emi	Emissions Quantification						
12.	Quantification Method	A description of the emission quantification methodologies and reference for each emission and offset category.  Where multiple methods are used, specify which facility/source uses the respective method.	Are the correct quantification methodologies being used? Are the methods based on reliable accurate and current references? How do the methods compare to the Climate Leaders guidance documents?	Check a sample of each GHG related calculation that takes place at the site by confirming the algorithm and factors match those documented in the IMP, and recalculating no more than three of each computation type. Such calculations may include converting units, summing monthly totals to annual totals, computing emissions by source, converting to CO <sub>2</sub> -eq, totaling facility CO <sub>2</sub> -eq, or other computations.  If GHG calculations are performed onsite, is there an existing process for communication of changes from the corporate level to this site? If past changes were made, were they indeed communicated?			
13.	Emission Factors and Other Constants	A list of emission factors and other constants and reference for factors and constants (i.e., conversion factors) for each emission category.  Descriptions of the process for how external references are kept current.  Where multiple factors are used, specify which facility/source uses the respective factor.	Are the correct emission factors being used, based on reliable accurate and current references? Are factors updated annually? How do the factors compare to default values in the Climate Leaders guidance documents (e.g., do stationary combustion CO <sub>2</sub> factors account for carbon oxidation)? What do electricity production emission factors represent?	If facility-specific emission factors are used, does facility have documentation to support (e.g., carbon content of fuels, supplier-provided emission factors for electricity)?  If default factors are used, does the facility have adequate information to develop specific emission factors to use instead?  If activity data conversions are performed onsite, is there an existing process for communication of changes from the corporate level to this site? If past changes were made, were they indeed communicated?			
Data	<b>Management</b>	•					
14.	Activity Data	A description/name of the source of activity data documents or processes required to complete quantification methodology (e.g., monthly fuel purchase records, fuel meter, internal tracking and aggregation documents, etc.) for each item of activity data. Where multiple data sources are used, specify which facility/source uses the respective data source.	Is activity data based on appropriate sources? Is the right activity data being collected for the quantification method described in #12? Is activity data the most accurate available (e.g., fuel purchases adjusted for stock, fuel use based on physical units not \$)?	Does the ultimate source and type of activity data collected for each emission type match that described in the IMP? Are any unit conversions, other than as described in the IMP, performed on the data before reporting?  Is a better (more efficient, more accurate) source of activity data available?  If the partner provided facility-level inventory data, does the reported facility total match that indicated by the activity data, conversion factors, and quantification method?			

	IMP Component	Corporate Level Detail Required	Corporate Desktop Review: Issues to Consider	On-site IMP Review Issues to Consider		
Data	Data Management (continued)					
15.	Data Management [Roles and responsibilities can be defined over time]	A description of the process flow for collecting and processing activity or monitoring data from its original source to the final emission data entered into the inventory.  Includes a description of roles and responsibilities.	Is the process likely to avoid data errors in computing final rolled up inventory totals? Are roles and responsibilities properly defined? Is the process adequately defined and institutionalized? Are the person/persons responsible for collecting data identified?	Does the process flow match that described in the IMP?  Does each representative understand their role and responsibilities?  More efficient method possible for data collection and processing? Where are likely areas for data corruption and how can error be minimized (from raw data to incorporation into the inventory)? Determine whether opportunities exist to integrate GHG data collection and management with other existing facility reporting tools.  Trace approximately two (2) data points for each data type to confirm that raw data was correctly entered into data management system, calculation tool, or hand calculation.		
16.	Normalization Factor(s) Selection [Only necessary if Partner chooses to set goal based on an intensity tar- get]	A description of the normalization factor (units of product, \$ revenue, etc.) used to calculate emissions intensity.  Document how the normalization factor was selected.	Does the normalization factor and associated intensity value reasonably represent the emissions management performance?	Is the normalization factor and intensity value relevant for tracking performance at this facility? Is there a better normalization factor for this facility?  Is the normalization factor and intensity value well communicated?		
17.	Data Collection Process – Normalization Factor [Only necessary if Partner chooses to set goal based on an intensity tar- get]	A description of the process flow for collecting and processing activity or monitoring data to obtain the final normalization factor data entered into the inventory.	Is the process likely to avoid data errors in computing final normalization factor and intensity value totals?	Is the process likely to avoid data errors in computing final normalization factor and intensity value totals?		
18.	Data Collection Process – Quality Assurance	A description of the major sources of uncertainty and quality assurance measures for the data process flow. This includes information on how measurement system accuracy is assessed.	Is there a process for minimizing error? Are all likely error sources considered? How are uncertainties being addressed?	Are QC checks performed as described in the IMP? Are key staff aware of possible sources of error and means for minimizing that have not been considered in the IMP?  Are reported uncertainty estimates for measurement devices realistic? Are measurement devices regularly calibrated?		

	IMP Component	Corporate Level Detail Required	Corporate Desktop Review: Issues to Consider	On-site IMP Review Issues to Consider		
Data	Data Management (continued)					
19.	Data Collection System Security [Can be defined over time]	A description of how data collection system security is maintained.	How likely are errors to occur within the data collection and management system due to spreadsheets being damaged or otherwise transformed, unauthorized access to databases, and other information system problems?	Are safeguards implemented as described in the IMP? Are there opportunities for further improving data collection security?		
20.	Integrated Tools [OPTIONAL]	A description of how GHG reporting and processing is integrated with other reporting tools.	Are tools integrated to enhance efficiency?	Are there opportunities for combining reporting systems to improve efficiency and consistency? Look for opportunities to leverage systems, schedules, data, etc.		
21.	Frequency	The frequency for reporting facility data to the corporate level.	Is the reporting frequency sufficient to avoid significant errors in annual reporting (i.e., at least annual reporting)?	Is data reported at frequency described in the IMP? Would alternate frequencies improve site-level efficien- cy (for example matching GHG reporting timing to follow Title V reporting or GRI reporting.)		
Base	e Year					
22.	Adjustment – Structural Changes	A description of the approach for adjusting base year emissions for mergers, acquisitions, divestitures, and outsourcing.  This includes defining the process for determining when changes are necessary.	Is there an effective and accurate process for adjusting base year emissions for structural changes? What triggers changes?  Are the changes implemented consistently (for emissions decreases as well as increases)?  How is this linked to #5 (method) and #6 (list) of facilities?	Were structural changes incorporated in base year inventory, if appropriate based on IMP? Are organizational/operational boundary changes (if applicable) communicated to the site?		
23.	Adjustment – Methodology Changes	A description of the approach for adjusting base year emissions for changes in calculation methodologies, emission factors, or error correction.  This includes defining the process for determining when changes are necessary.	Is there an effective and accurate process for adjusting the base year emissions for methodology changes? What triggers changes? How is this linked to #12 (method) and #13 (factors) for calculating emissions?	Is there an effective and accurate process for adjusting the base year emissions for methodology changes? Are methodology changes (if applicable) communicated to the site?		

	IMP Component	Corporate Level Detail Required	Corporate Desktop Review: Issues to Consider	On-site IMP Review Issues to Consider
Man	agement Tools			
24.	Roles and Responsibilities [Can be defined over time]	A description of overall roles and responsibilities for corporate GHG inventory development and maintenance, include discussion of management role(s).	Are roles and responsibilities sufficiently spelled out to ensure that tasks are completed? Are roles and responsibilities adequately defined and institutionalized?	Do facility personnel feel that they adequately understand their responsibilities?
25.	Training [Can be defined over time]	A description of inventory development training received by inventory development team members.	Is sufficient training provided to ensure that tasks are completed accurately?  Are new staff properly trained and aware of their roles and responsibilities?	Does training received match that described in the IMP? Based on discussions with facility personnel, is the training is appropriate, or can it be improved? Determine if roles are adequately institutionalized to ensure proper implementation.
26.	Document Retention and Control Policy [Can be defined over time]	A description of how version control is maintained for GHG inventory management guidelines. A description of the Partner's document retention policy.	Is there a reasonable process for ensuring that all participants are working to the same IMP guidelines?  Does document retention policy insure data is maintained long enough to adjust base year emissions in goal year if needed?	Are document retention and control policies understood and implemented as described in IMP?
Aud	iting & Verification			
27.	Internal Auditing	A description of the internal audit process. Timing of the audit.	Is there an audit process that is likely to identify gaps and errors in inventory management?  Are auditor roles and responsibilities properly defined in #24?	Have audits occurred as described in IMP? Have any corrective actions resulted?
28.	External Validation and/or Verification [OPTIONAL]	If applicable, a description of the process for external review. Timing of the audit.	What protocol was the external validation/verification performed to? What were the overall results of the validation/verification?	Have audits occurred as described in IMP? Have any corrective actions resulted?
29.	Management Review [Can be defined over time]	A description of the senior management review process.	Are senior managers involved in signing off on the inventory? Are manager roles and responsibilities properly defined in #24?	Are facility management reviewing inventory performance as (if) described in the IMP?
30.	Corrective Action [Can be defined over time]	A description of the process for implementing and documenting corrective actions for all internal and external reviews.	Is there a process for correcting errors or problems found? Is it clear who is responsible for correcting problem, when the problem should be solved, and how the correction process is tracked?	Is the process to ensure corrective actions are addressed appropriately (i.e., by the appropriate staff) and in a timely fashion occurring as described in the IMP? Can this process be improved based on findings onsite?